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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,702	03/17/2004	Seiji Manabe	MAT-7927US1	4821
23122	7590	03/17/2008		
RATNERPRESTIA				
P O BOX 980				
VALLEY FORGE, PA 19482-0980				
EXAMINER				
CHANG, KENT WU				
ART UNIT		PAPER NUMBER		
2629				
MAIL DATE		DELIVERY MODE		
03/17/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/802,702

**Applicant(s)**

MANABE ET AL.

**Examiner**

Kent Chang

**Art Unit**

2629

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) 12, 13 and 16-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 14 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 7/28/05, 3/17/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Claims -- are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/16/07.
2. Applicant's election without traverse of the Species corresponding to claims 1-11 as illustrated in Figures 1-9 and 14-17, in the reply filed on 8/1/07 and 11/16/07 is acknowledged. However, claims 14 and 15 recite similar limitations as independent claim 1, therefore they were treated as generic claims directed to the same Species elected by applicants.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
6. Claims 1-7, 10-11, 14, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oyama et al (US 5,808,708).

Consider claims 1, 14, 15. Oyama teaches a surface lighting device for a LCD device comprising: a light source (3); a light-guide-member (4) including: an incident plane (4c) for receiving light emitted from said light source; a light-guiding-section for guiding the light incident on said incident plane; and a light-emitting-section (4d) for emitting the light travelling through said light-guiding-section (column 5 line 39 to column 7 line 27). Oyama further teaches to build a lighting device for an LCD that has small thickness, large emitting surface, and even light emitting (column1 line 65 to column 2 line 51). Therefore, it would have been obvious for one ordinary skill in the art at the time of the invention to choose any value for

the above parameters and other parameters including a small thickness such as not more than 8 mm, a large emitting surface such as not less than 500 mm.<sup>sup.2</sup>, and even light emitting such as with a ratio of minimum luminance vs. maximum luminance of said light-emitting-section being not less than 0.3, an average luminance of said light-emitting-section ranging from 1 cd/m.<sup>sup.2</sup> to 200 cd/m.<sup>sup.2</sup>, and a luminance change amount per unit length is not more than (average luminance).times.100 cd/m.<sup>sup.3</sup> since choosing the value for the above parameters merely depends on the availability of the parts, the configuration of the system, and the cost requirement of the system.

Consider claim 2. The surface lighting device of Oyama further comprising a barrier plate (5) for blocking the light emitted from entering directly to said light-guide-member.

Consider claim 3. The surface lighting device of Oyama wherein said barrier plate has a reflecting function.

Consider claims 4 and 6. The surface lighting device of Oyama further comprising a holder for accommodating said light-guide-member (see Figure2). Obviously, said holder, said barrier plate, and said reflecting member could have been unitarily molded or by any other known methods so as to be tightened together.

Consider claim 5. The surface lighting device of Oyama further comprising a reflecting member for reflecting the light emitted toward outer circumference of said light-guiding-section.

Consider claim 7. The surface lighting device of Oyama wherein the emitted light reflects on outer circumference of said light-guiding-section, then travels to said light-emitting-section (column 5 line 39 to column 7 line 27).

Consider claim 10. It would have been obvious for one ordinary skill in the art at the time of the invention to modify the lighting device of Oyama having a half width of a light emitting wavelength of said light source being not more than 50 nanometer so as to provide light with needed color in a low cost.

Consider claim 11. It would have been obvious for one ordinary skill in the art at the time of the invention to modify the surface lighting device of Oyama having a light-emitting-diode having a cylindrical lens light source so as to provide backlight with high intensity, low power consumption, low manufacturing cost, and small size. The examiner takes Official Notice that using light-emitting-diode having a cylindrical lens in a lighting device is well known in the display art to provide backlight with high intensity, low power consumption, low manufacturing cost, and small size.

7. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oyama et al (US 5,808,708) as applied to claims 1-7 above, and further in view of Arikawa et al (US 6,437,840).

Oyama teaches to use a diffusing sheet disposed on a face opposite to said light-emitting-section so as to generate even light to illuminate the display (column 7 lines 6-13) but is silent in using a light scattering layer.

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However, Arikawa teaches to use a light diffusion layer or a light scattering layer for a display (see column 11 lines 5-13 and claim 5). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to either a light scattering layer or a light diffusing layer as taught by Arikawa in the device of Oyama since they both function equally well in generating light with uniform intensity.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Koike et al (US 5,528,709); Shinohara et al (US 167,182); Ochiai (US 6,196,691); Parker et al (US 6,712,481).

### **CONTACT INFORMATION**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent Chang whose telephone number is 571-272-7667. The examiner can normally be reached on Monday to Thursday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz, can be reached at 571-272-3638.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

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**571-273-8300**

Hand-delivered responses should be brought to the Customer Service Window, now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kent Chang/

Primary Examiner, Art Unit 2629

Kent Chang  
Primary Examiner  
Art Unit 2629

kc  
3/10/08